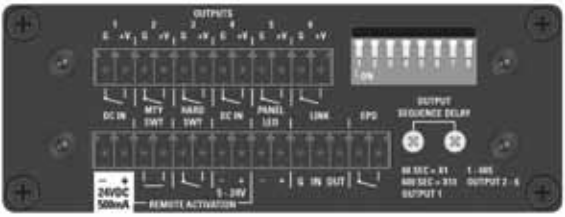
ETA-SEQ6
Sequencer Controller



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Specifications are subject to change without notice.

Description

The ETA Systems ETA-SEQ6 Sequencer Controller features 6 outputs that are configurable individually to be either a 24VDC output or Hard Switch Contact Closure (CC). There are two separate output sequence time delay trimmers ranging from 1 second to 6 minutes. Activation can be done via the front panel or remotely via Hard Switch CC, Momentary Switch or DC Voltage. The ETA-SEQ6 also incorporates an Emergency Power Down (EPD) port for local fire codes. You can link two ETA-SEQ6 units together giving you 12 sequenced outputs.

The ETA-SEQ6 is a compact (1.5" x 4" x 2.75") Time Saving Device that is designed to solve some of the common audio system problems in the easiest, most efficient, and cost-effective way. It is made from high quality components and includes removable individual I/O connectors for quick and precise wiring, separate ground terminals for all I/Os assuring secured connections, and a removable security cover for the system activation switch. The ETA-SEQ6 is highly efficient and meets most energy standards as one 24V DC power supply (available separately) can power multiple ETA Time Saving Devices.

Features

- 6 Sequenced Outputs
- Assignable 24VDC or Hard Switch Contact Closure (CC) per Output
- Sequence 1 is Adjustable: Delay Time 1 Second to 10 Minutes
- Sequences 2 - 6 are Adjustable: Delay Time 1 Second to 1 Minute
- Remote Activation via 5-24VDC, Momentary Contacts, Hard Switch Contacts
- Status Indicator for Each Output
- Emergency Power Down “EPD” Port
- Link Out for Two ETA-SEQ6 Controllers
- Voltage Output for Remote LED Status Display
- Separate Wiring Port for Each I/O
- Cable Management System
- Multiple Mounting Configurations
- Removable Phoenix Style I/O Connectors
- Meets Most Energy Standards
- Compact Chassis Design

Interfaceable ETA Products

- ETA-ECM20
- ETA-ECM20M
- ETA-ECM15SH
- ETA-ECM20SH
- ETA-ECM30
- ETA-ECM2063

Installation

- Churches
- Restaurants
- Sports Bars
- Schools
- Industrial Facilities
- House of Worship

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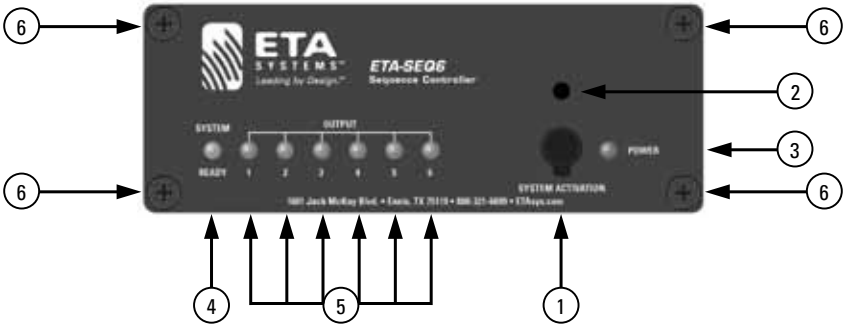
Front Panel Description



1. **System Activation Switch** - Press to activate the ON or OFF sequence.

2. **System Activation Switch Security Cover** - If you do not want to use the Front Panel Activation Switch, place the security cover over the switch and secure using the retainer screw.

3. **Power LED** - Illuminates Blue when 24VDC power is present.

4. **System Status/Ready LED** - Flashes Green during a sequence and will illuminate steadily when sequence is complete indicating the system is powered up. When the LED is Off, it indicates the system is in the Off mode.

5. **Channel Output LED** - Each of the 6 outputs have their own LED which illuminates Red when the specific channel / output is active.

6. **Bracket Retainer Points** - Each TSD includes two mounting brackets for securing the TSD to a cabinet or wall. Remove screws and align the bracket with the panel hole before firmly tightening the screws.

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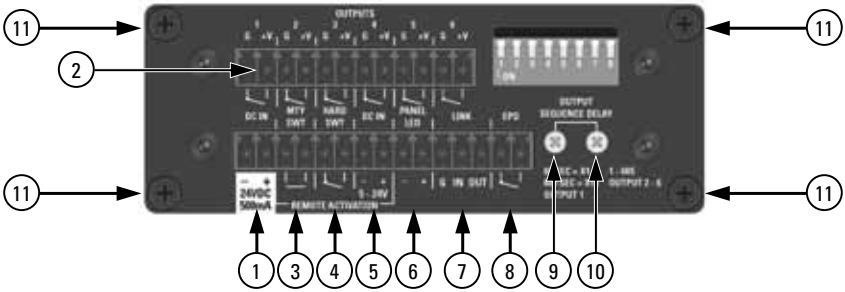
Rear Panel Description



TSD Input/Output connections are removable for easy system wiring. The connectors have a 3.5mm pitch between pins.

1. **DC Power Input** - Each TSD that requires DC power comes with a 2 position connector for an external 24VDC power supply (sold separately). Because of the TSD's low power consumption, a single external power supply may power more than one TSD. Please refer to the specifications on current requirements in milliamps to match with the appropriate power supply. Please observe the polarity of the wiring to this connector. **Note:** It is acceptable to exceed the current requirements of the TSD but NOT safe to use a power supply that is below the current requirement of the device. Use a power supply with a 500mA capacity (Atlas TSD-PS24V500MA).

2. **Channel Output** - There are 6 channel output control ports. Each output can be assigned to provide a 24VDC output or a Hard Switch Contact Closure (CC). See the Function Settings for Output configuration below.

3. **Remote Activation Momentary Switch Port** - Remote System activation can be done several hundred feet away via a momentary contact closure type switch.

4. **Remote Activation Hard Switch Contact Closure (CC) Port** - Remote System activation can be done several hundred feet away via a Hard Contact closure type switch.

5. **Remote Activation 5 - 24VDC Port** - Remote System activation can be done several hundred feet away by applying 5 - 24VDC. Only a few milliamps of current is required.

6. **Panel LED Port** - This port can be used to power an LED on a remote panel for system status indication. The 24VDC Output will pulsate during a sequence and remain at a steady state when the sequence is completed and all outputs are on.

7. **Link Control Port** - You can combine two ETA-SEQ6 units together to make a 12 step sequence system. **Note:** Pay special attention to the Input and Output terminals. Connect the Output from unit 1 (Master) to the Input of unit 2 (Slave). Connect the Output from unit 2 (Slave) to the Input of unit 1 (Master). Pay close attention to this or the Link Out will not work. See the Function Settings for the Master/Slave configuration below.

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8. **EPD "Emergency Power Down" Port** - When an urgent system shut down is required, short the two pins together and the sequence portion will be bypassed and turn Off all outputs at the same time. This EPD feature is commonly used with fire control systems.

9. **Delay Pot for Sequence 1 Output** - The time between Sequence 1 Output and Sequence 2 Output can be set by rotating the pot following the indicators on the panel. In X1 mode the delay time adjustment is from 1 second to 60 seconds. In X10 mode the delay time adjustment is from 10 seconds to 600 seconds, or 10 minutes. See the Function Settings below for Sequence 1 Output X1 or X10 configuration.

10. **Delay Pot for Sequences 2-6** - The time between Sequence 2 Output and Sequence 6 Output can be set by rotating the pot following the indicators on the panel. Whatever the time is set to will be the time between Sequenced outputs.

11. **Cable Management Retainer Points** - Use the rear panel screws for connecting the included cable retainers. Each TSD comes with two cable retainers for simplified cable management.

Dip Switch Function Identification

SWITCH FUNCTIONS

1	2	3	4	5	6	7	8
RELAY ASSIGNMENT CONTACT CLOSURE OR 24VDC						LINK ASSIGNMENT	OUTPUT 1 DELAY
OUT 1	OUT 2	OUT 3	OUT 4	OUT 5	OUT 6		
24VDC	24VDC	24VDC	24VDC	24VDC	24VDC	MASTER	X1
CC	CC	CC	CC	CC	CC	SLAVE	X10

Switch Position

- DIP SW # 1-6 - Channel Output Assignment - Each output can be assigned to deliver a Hard Switch Contact Closure (CC) or +24VDC output when activated by the Sequence for Output Channels 1-6.
- DIP SW # 7 - Link Assignment Configuration - This switch determines if the unit is to be a Master or a Slave unit. The Master unit is always the first in line of the sequence.
- DIP SW # 8 - Sequence Output 1 Time Delay - In the X1 setting the adjustable time delay setting is from 1s to 60s and in the X10 position the time delay setting is from 10s to 600s, or 10 minutes.

Mounting

There are three ways to securely mount this TSD:

1. Velcro™ - Each unit includes industrial-grade Velcro™ with adhesive backing to adhere to any flat surface.

2. Brackets - Each unit includes two mounting brackets to secure to a cabinet or wall.

3. Rack Mount Panel - The optional TSD-RMK rack mount panel supports up to four TSDs in a 1RU space.

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Specifications

Description	Sequence Controller
Chassis Color	Black
Chassis Material	Aluminum
Outputs	
Type	Qty 6, Sequenced Channel Output, Selectable 24VDC or CC
Connection	Removable 3 Position Captive Screw 3.5mm Spacing
Type	Qty 1, Link Input/Output
Connection	Removable 3 Position Captive Screw 3.5mm Spacing
Type	Qty 1, Output 24VDC for Remote Panel LED Indicator
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Sequence Activation Controls	
Type	Qty 1, Momentary Switch Front Panel
Type	Qty 1, Momentary Switch Port
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Type	Qty 1, Hard Switch Contact Closure (CC) Port
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Type	Qty 1, DC Voltage Port
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Type	Qty 1, Emergency Power Down (EPD)
Connection	Removable 2 Position Captive Screw 3.5mm Spacing
Controls	
Dip Switch Function	• Output 1-6, Assign 24VDC or Contact Closure (CC) • Link Assignment • Sequence Output 1 Time Setting: X1 or X10
Output 1 Sequence Delay	Trim Pot, 1 sec - 60 sec or 10 sec - 10 min (Selectable)
Output 2 - 6 Sequence Delay	Trim Pot, 1 sec - 60 sec
Indicators	
Sequence Status	Green, Qty 1
Output Sequence Status	Red, Qty 6
Power	Blue
Mounting	
Velcro™	Industrial-Grade, Included
Brackets	Qty 2, Included
TSD-RMK	Optional 1 RU Rack Mount Panel (Supports 4 TSD Units)
Cable Retainer	Qty 2, Included

Specifications are subject to change without notice.

Power Requirements

Voltage	24VDC, 500mA
Power Consumption Current	100mA
Power Consumption VA Watts	2.4W
Dimensions	H 1.5" (39mm) x W 4" (101mm) x D 2.75" (70mm)
Weight	6oz, .165kg

Accessories

TSD 24VDC Power Supplies
TSD-RMK 1 RU Rack Panel

Safety and Certifications

External Power Supply	cUL, CE, RoHS, TUV

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Limited Warranty

All products manufactured by ETA Systems are warranted to the original dealer/installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of one year. Additionally, fuses and lamps carry no warranty. ETA Systems will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workmanlike manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to ETA Systems do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any non-warranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

EXCEPT TO THE EXTENT THAT APPLICABLE LAW PREVENTS THE LIMITATION OF CONSEQUENTIAL DAMAGES FOR PERSONAL INJURY, ETA SYSTEMS SHALL NOT BE LIABLE IN TORT OR CONTRACT FOR ANY DIRECT, CONSEQUENTIAL OR INCIDENTAL LOSS OR DAMAGE ARISING OUT OF THE INSTALLATION, USE OR INABILITY TO USE THE PRODUCTS. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

ETA Systems does not assume, nor does it authorize any other person to assume or extend on its behalf, any other warranty, obligation, or liability. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

Service

Should your ETA-SEQ6 require service, please contact the ETA Systems warranty department at 1-877-689-8055, ext. 277 to obtain an RA number.

ETA Systems Tech Support can be reached at 1-800-321-6699.

Visit our web site at www.ETAsys.com to see other ETA Systems products.

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